

***LineUp With Math™* Alignment**
Texas Essential Knowledge and Skills (TEKS) for Mathematics
§111.24 Mathematics, Grade 8

b. Knowledge and Skills

(3) Patterns, relationships, and algebraic thinking.
The student identifies proportional relationships in problem situations and solves problems. The student is expected to:

**Knowledge and Skills
and Performance Descriptions**

(B) estimate and find solutions to application problems involving percents and proportional relationships such as similarity and rates.

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

(14) Underlying processes and mathematical tools.
The student applies Grade 8 mathematics to solve problems connected to everyday experiences, investigations in other disciplines, and activities in and outside of school. The student is expected to:

**Knowledge and Skills
and Performance Descriptions**

(A) identify and apply mathematics to everyday experiences, to activities in and outside of school, with other disciplines, and with other mathematical topics;

***LineUp With Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness;

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

(C) select or develop an appropriate problem-solving strategy from a variety of different types, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem;

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

(D) select tools such as real objects, manipulatives, paper/pencil, and technology or techniques such as mental math, estimation, and number sense to solve problems.

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

--Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.